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Ram. U. Verma* (verma99@msn.com), 12085 Lake Cypress Circle, Suite I109, Orlando, FL 32828. *Hybrid Over-Relaxed Proximal Point Procedure and Generalized Yosida Regularization for First-Order Evolution Inclusions.*

First, a hybrid over-relaxed proximal point algorithm based on the operator variational convergence in the context of approximating solutions of a general class of inclusion problems is introduced. Then the generalized Yosida regularization using the theory of nonlinear semigroups is applied to first-order evolution inclusions in Hilbert space as well as in Banach space settings. The generalized Yosida regularization is not limited to just first-order evolution inclusions, but it encompasses other types of differential inclusions and beyond. (Received September 11, 2008)